

ABSTRACT OF THE DISCLOSURE

An apparatus, method, and system for providing asymmetric signal correction in a HDD system using magneto-resistive (MR) heads for reading information stored thereon. The MR head produces a signal that is asymmetric, and an asymmetric correction circuit corrects the asymmetric signal for further processing. The asymmetric correction circuitry comprises a differential amplifier having a variable gain for producing a current proportional to the asymmetric signal. The differential amplifier is coupled with two high speed switches for producing an output signal having only positive polarity. When the asymmetric correction output signal combines with the input signal, the resultant signal approximates the inverse distortion of the asymmetric input signal.